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ABSTRACT

Instructions are provided for constructing a learning center on littering. Activity sheets (pictures and poems) which may be duplicated for use with the center and lists of environmental, economic, and energy concepts to be fostered through class activities and discussions are also provided. An integral part of the center is the book "Let's Twitter about Litter" (grade 3.2 reading level). To introduce the center the teacher could either read the book aloud to students or have them take turns reading it in a reading group. (Author/JN)

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LET'S TWITTER ABOUT LITTER

AN ENVIRONMENTAL MESSAGE FOR GIRLS AND BOYS

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ARKANSAS DEPARTMENT OF EDUCATION

LET'S TWITTER ABOUT LITTER

AN ENVIRONMENTAL MESSAGE FOR
GIRLS AND BOYS

ARKANSAS DEPARTMENT OF EDUCATION

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Little Rock
1980



IN THIS QUIET STATE PARK MANY ANIMALS LIVE TOGETHER. DO YOU SEE MERLE, THE SQUIRREL, HIGH IN THE TREE? THE MOCKINGBIRD IS NAMED YAKITY-YAK BECAUSE HE TALKS SO MUCH. FUNNY BUNNY PABBIT IS HOPPING IN THE GRASS.



ZZOOOOOMM.....

THUMP.....

SQUAWK.....

OUCH!!!!

"MERLE, WHAT HAPPENED? MY HEAD HURTS!"
"A BOTTLE HIT YOU ON THE HEAD," SAID MERLE
THE SQUIRREL.

"WHERE DID IT COME FROM? ASKED YAKITY.
"IT CAME FROM A BLUE CAR THAT WAS GOING
VERY FAST," SAID MERLE.



"WHY WOULD SOMEONE THROW A BOTTLE AT ME?"
ASKED YAKITY. "PEOPLE ALWAYS LIKE BIRDS."
"I DON'T KNOW, YAKITY, I'M ONLY A
SQUIRREL. WHY DON'T YOU ASK FUNNY BUNNY?"

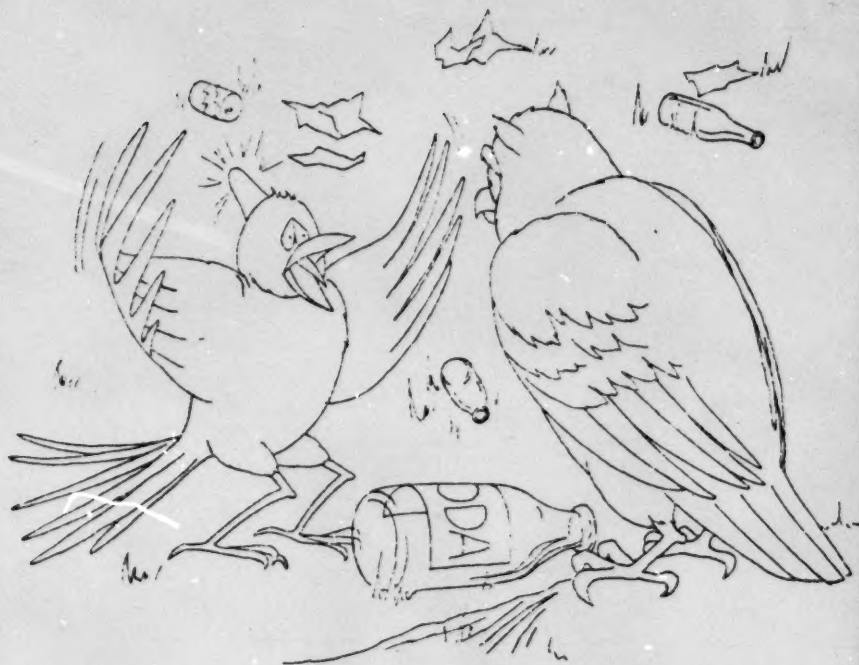
"LOOK AT THE BUMP ON MY HEAD, FUNNY BUNNY. SOMEONE IN A CAR HIT ME WITH A BOTTLE. WHY DID THEY DO IT?" ASKED YAKITY.



"YOU MUST HAVE SAID SOMETHING TO MAKE THEM MAD," SAID FUNNY BUNNY.

"I DIDN'T HAVE TIME TO SAY ANYTHING. THE CAR WAS GOING TOO FAST," YAKITY EXPLAINED.

"WELL, YAKITY, I DON'T KNOW. I'M ONLY A RABBIT. GO ASK FRANCIS—OWLS KNOW ALMOST AS MUCH AS PEOPLE."

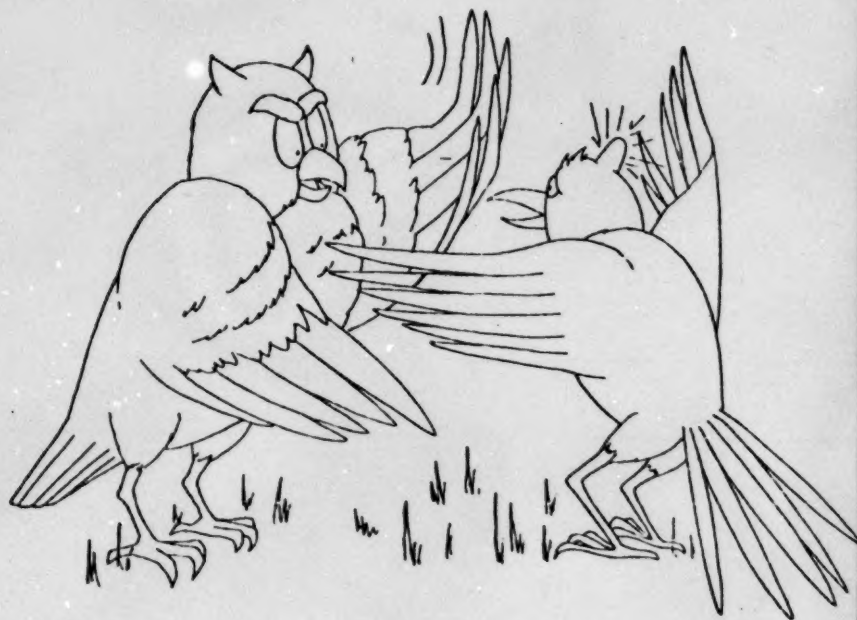


"ALL THE ANIMALS SAY YOU ARE VERY SMART, OH WISE FRANCIS," SAID YAKITY. "PLEASE TELL ME WHY SOMEONE HIT ME WITH A BOTTLE."

FRANCIS LOOKED SAD AND SAID, "IT IS NOT JUST THAT ONE BOTTLE THAT IS IMPORTANT, IT'S...."

"WELL, IT'S NOT YOUR HEAD THAT GOT HIT! SOMEONE IS MAD AT ME," SHOUTED YAKITY.

"THEY DIDN'T SEE YOU, YAKITY," EXPLAINED FRANCIS. "PEOPLE THROW ALL KINDS OF THINGS IN THE PARKS AND ON THE STREETS OF TOWNS. WE CALL THIS LITTER AND IT IS A VERY BAD THING."



"BUT," SAID YAKITY, "ALL THE ANIMALS SAY PEOPLE ARE SO WISE. WHY DO THEY LITTER?"

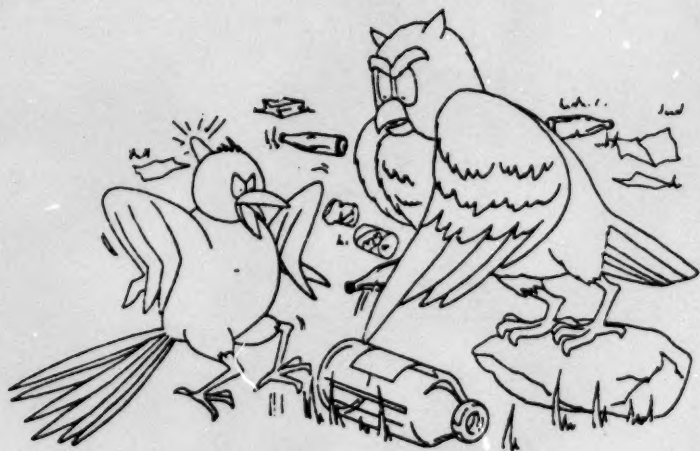
"COME WITH ME. I WANT TO SHOW YOU SOME MORE LITTER. THEN I'LL TELL YOU WHY WE HAVE IT," FRANCIS SAID.

YAKITY AND FRANCIS FLEW OVER ROADS AND TOWNS. THEY SAW A LOT OF TRASH.

FRANCIS STOPPED AT A PARK AND SAID, "SEE HOW BAD THIS PLACE LOOKS BECAUSE OF LITTER? THE OWLS SAY THAT LONG AGO PEOPLE DID NOT THROW SO MUCH AWAY. THINGS WERE NOT WRAPPED UP IN SO MUCH PAPER.

"PEOPLE USED MANY THINGS OVER AGAIN. THEY USED BOTTLES OVER AND OVER BY WASHING THEM AND FILLING THEM UP AGAIN.

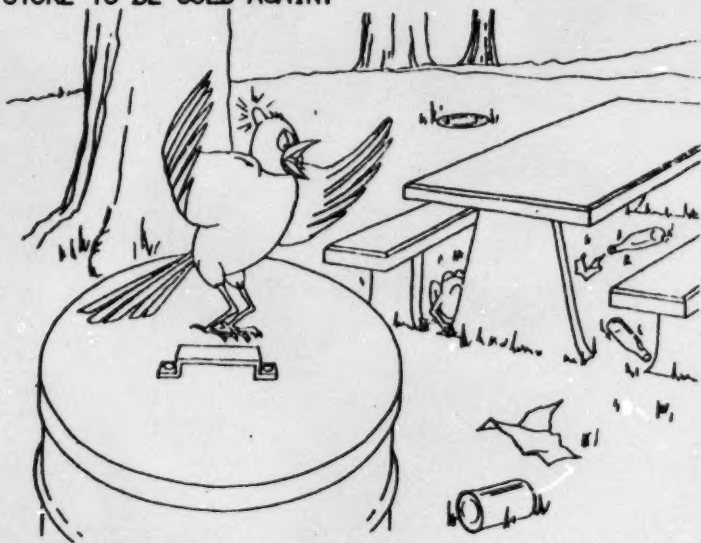
"PEOPLE SAY THEY 'RECYCLE' THINGS WHEN THEY USE THEM AGAIN."



"WE COULD HAVE PRETTY PARKS AGAIN—WITHOUT LITTER," SAID FRANCIS.

"HOW?" ASKED YAKITY.

"PEOPLE SHOULD TAKE BOTTLES BACK TO THE STORE TO BE USED AGAIN."



"HOW DO YOU GET THEM TO TAKE BOTTLES BACK?" ASKED YAKITY.

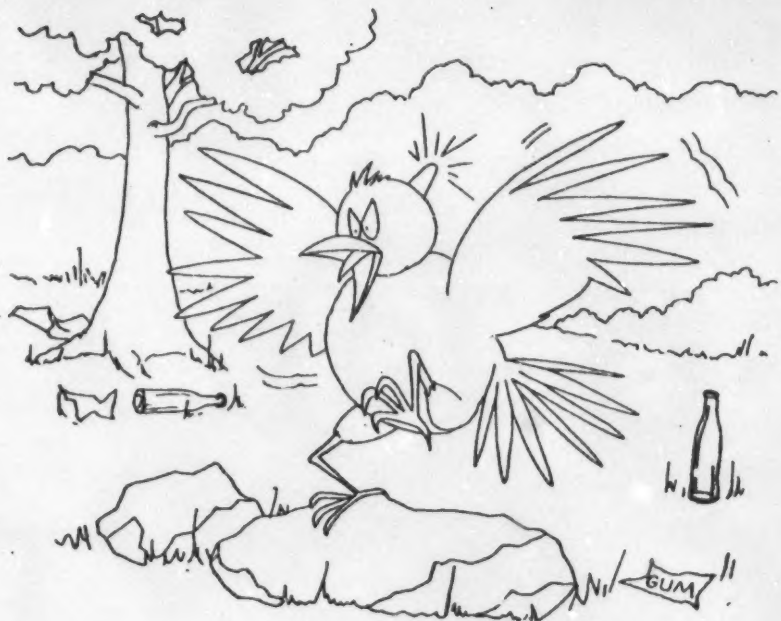
"IF PEOPLE GOT MONEY FOR USED BOTTLES THEY WOULD TAKE THEM BACK," SAID THE WISE OWL.
"THEY WOULD NOT THROW THEM OUT OF CARS OR DROP THEM UNDER TABLES IN THE PARK."



"MANY THINGS CAN BE USED AGAIN. THINGS LIKE PAPER AND CARS AND CANS ARE MADE FROM PLANTS OR ANIMALS, OR STUFF LIKE IRON ORE THAT PEOPLE DIG FROM THE GROUND. PEOPLE CALL THESE 'NATURAL RESOURCES'," FRANCIS EXPLAINED.

"PEOPLE ARE USING THESE RESOURCES UP TOO FAST. THEN THEY THROW IT ALL AWAY.

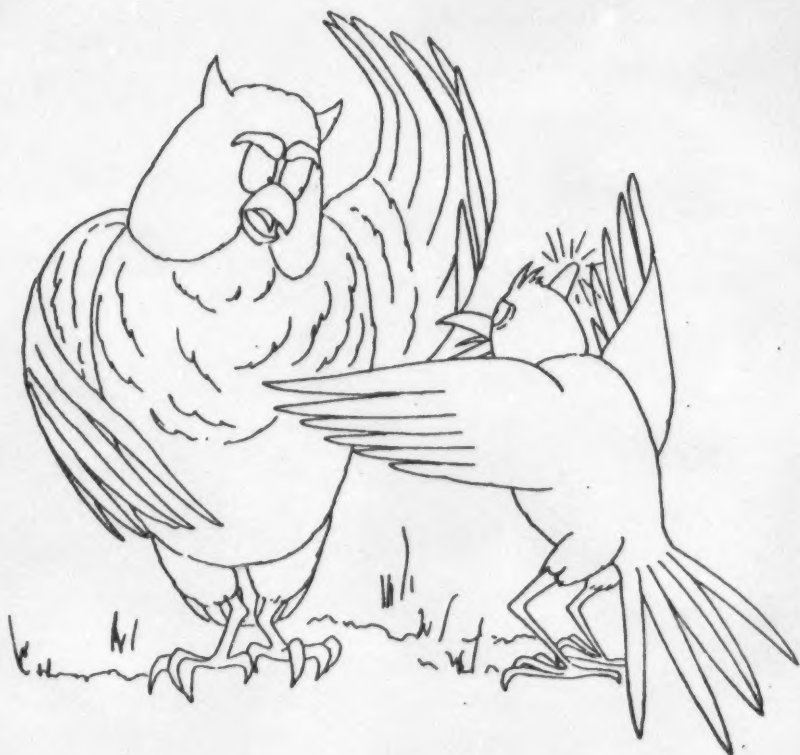
"THEY SHOULD USE THINGS OVER AGAIN AS THEY DID IN THE OLD DAYS."



YAKITY STARTED TALKING VERY FAST AND SAID,
"I DON'T THROW GOOD THINGS AWAY. I SAVE LOTS
OF THINGS TO USE AGAIN LIKE STRING AND BITS OF
WEEDS TO MAKE A NEST.

"I'M NOT LIKE A MAGPIE WHO PICKS UP
BRIGHT THINGS AND DROPS THEM ALL OVER THE PLACE.

"AND I KEEP MY FEATHERS! I'M NOT LIKE
TREES! THEY LITTER IN THE FALL WHEN THEY DROP
THEIR LEAVES. AND I "



"STOP YOUR YAKING, YAKITY! YOU TALK AND TALK!" FRANCIS SCOLDED. "NOW, LISTEN!"

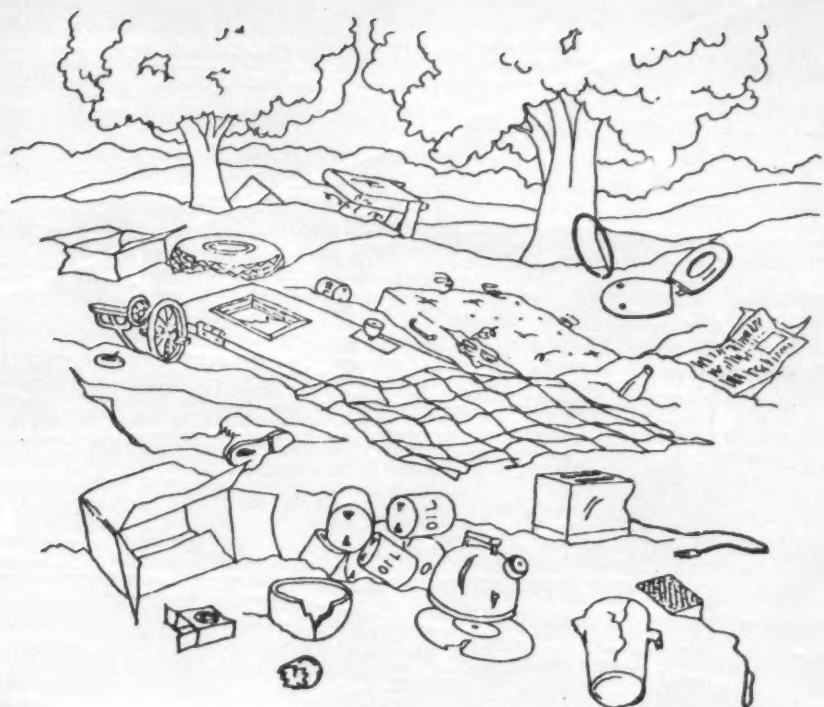
"ANIMALS AND TREES DO MAKE LITTER BUT THEIR LITTER WILL ROT AND BECOME PART OF THE SOIL. PEOPLE DIG HOLES AND BURY SOME OF THE TRASH THEY THROW AWAY. THEY COVER IT WITH DIRT. THEY HOPE THAT MUCH OF IT WILL ROT."



"SOME PEOPLE BUILD PLACES TO BURN TRASH AND THEY MAKE ENERGY FROM THE HEAT OF THE BURNING. THEY CAN USE THE ENERGY TO DO WORK LIKE RUN MACHINES.

"BUT," FRANCIS SAID SADLY, "PEOPLE THROW AWAY SO MUCH--BIG THINGS AND LITTLE THINGS-- PAPER, FOOD, CARS, OLD BED SPRINGS, CLOTHES, TOYS, POTS, PANS, CANS "

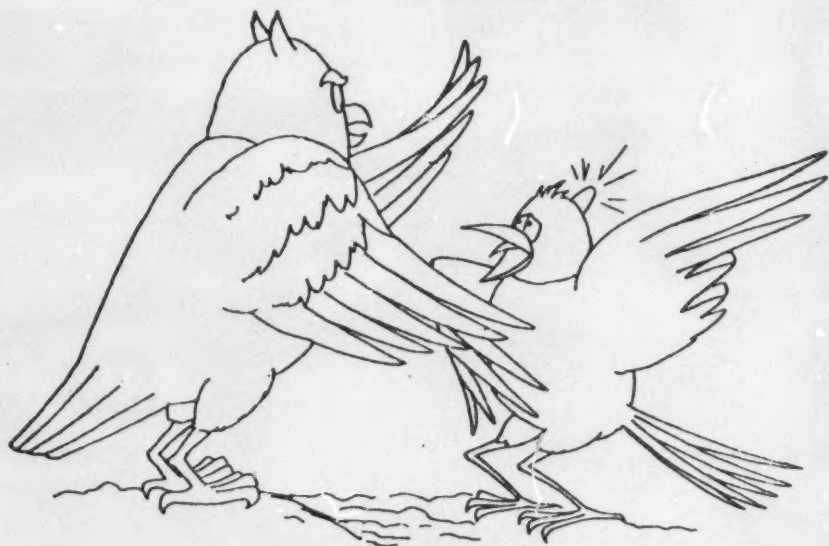
"AND BOTTLES!" SHOUTED YAKITY.



"...AND THE PEOPLE-LITTER LOOKS SO BAD!"
SAID FRANCIS. "IT CAN MAKE PEOPLE AND ANIMALS
SICK WHEN IT LAYS AROUND NEAR WATER AND WHEN
IT IS LEFT OUT IN THE OPEN. SOME LITTER CAN
EVEN HURT US LIKE BROKEN GLASS AND SHARP
PIECES OF IRON."

"FRANCIS, THAT MAKES ME FEEL BAD. MAYBE PEOPLE ARE NOT SO SMART AFTER ALL," CRIED YAKITY.

"SOME PEOPLE ARE, YAKITY. THEY ARE PROUD OF WHERE THEY LIVE AND THEY WANT IT TO LOOK PRETTY. THEY WANT TO KEEP PEOPLE AND ANIMALS SAFE AND HEALTHY. SOME PEOPLE WORK TO GET LAWS THAT HELP KEEP PARKS AND TOWNS CLEAN."



"WHAT KIND OF LAWS?" YAKITY ASKED. "THAT BLUE CAR WAS GOING TOO FAST. THERE IS A LAW ABOUT THAT!"

"OH, YAKITY! YOU ARE SO SILLY. I'M TALKING ABOUT LITTER--NOT SPEEDING."

"SOME PEOPLE WANT A LAW WHICH SAYS THAT BOTTLES, CANS AND GLASS JARS MUST BE TAKEN BACK TO THE STORE TO BE USED AGAIN. THEY WANT A LAW TO RECYCLE BOTTLES AND CANS," SAID FRANCIS.



YAKITY JUMPED UP AND DOWN BECAUSE HE WANTED TO ASK SOMETHING SO MUCH. "WHAT ABOUT OTHER LITTER? WHAT ABOUT THE FOOD THAT'S GARBAGE? THE PAPER? AND THE CARS? AND THE..."

"STOP!" CRIED FRANCIS, "I HEAR YOU!"

"LITTER IS ALL ABOUT US, YAKITY. IT NEEDS TO BE PICKED UP AND NOT LEFT AROUND TO LOOK BAD."

"DO THEY NEED TO TAKE IT BACK TO THE STORE LIKE THEY DO BOTTLES?" ASKED YAKITY.



"No," SAID FRANCIS, "STORES DON'T RECYCLE EVERYTHING. BUT. . .MANY THINGS COULD BE USED AGAIN. THEY CAN BE FIXED. THIS SAVES THE RESOURCES TAKEN FROM THE GROUND."

"AND PEOPLE CAN BUY ONLY THINGS THAT DO NOT HAVE TOO MANY PAPER WRAPPINGS."



"THEN THERE WOULD BE NO LITTER," CRIED
YAKITY. "HOORAY!"

"YES, THERE WOULD," SAID FRANCIS SADLY,
"THERE WOULD STILL BE FOOD, PLASTIC, PAPER,
LOTS OF TRASH."

"DO PEOPLE HAVE TO THROW THESE IN THE
PARK...BY THE ROAD...AND AT MY HEAD?" ASKED
YAKITY.



"PEOPLE MIGHT DO BETTER ABOUT PICKING UP IF THERE WAS A PLACE TO PUT LITTER. THERE SHOULD BE LOTS OF TRASH CANS FOR LITTER. THEN LOTS OF WORKERS ARE NEEDED TO DUMP THE TRASH CANS."

"HOORAY! THAT WOULD TAKE CARE OF EVERYTHING!" YELLED YAKITY.

"WELL...ALMOST," SAID FRANCIS. "PEOPLE NEED MORE PLACES WHERE THEY CAN DIG HOLES AND DUMP TRASH. THEN THEY WOULD NOT THROW THINGS IN BACK YARDS AND BY THE ROAD."



"ONE WAY, YAKITY, IS TO PAY PEOPLE TO HELP WITH CLEANING UP. PAY PEOPLE TO PICK UP THE TRASH CANS. PAY PEOPLE TO RECYCLE THINGS. PAY. . ."

"I FOUND THREE PENNIES AND ONE DIME LAST YEAR," SAID YAKITY. "BUT I DON'T THINK THAT WOULD PAY THEM."



"NOT YOU, YAKITY. ANIMALS DON'T PAY,
PEOPLE PAY. THAT WAY EVERYONE HELPS.

"THEIR TAXES WOULD PAY TO CLEAN UP
LITTER," SAID THE WISE OWL.

"AND CAN TAXES PAY FOR PLACES TO COLLECT
PAPER AND CANS TO RECYCLE THEM?" ASKED YAKITY.

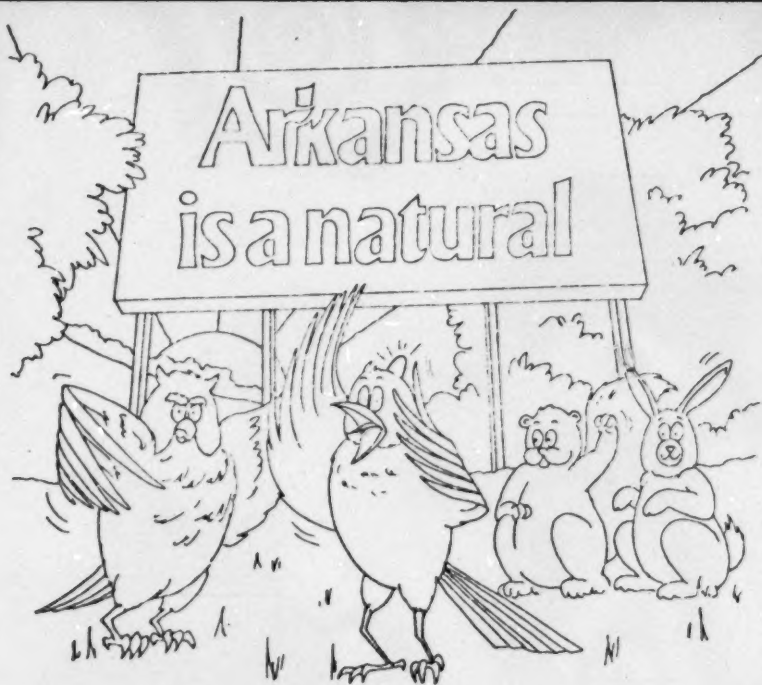
"YES," SAID FRANCIS, "AND TAXES CAN PAY
FOR THE BURNING OF TRASH TO MAKE ENERGY, TOO."



"Now--THAT WOULD MAKE EVERYBODY HAPPY!"
SHOUTED YAKITY WITH A BIG SMILE. "BUT WHO
WILL TELL THEM TO DO THIS?"

"WHY NOT YOU, YAKITY?" ASKED FRANCIS.
"YOU LIKE TO TALK A LOT."

"BUT," SAID YAKITY, "WHO WILL CARRY THE
WORD? AFTER ALL, I'M ONLY A BIRD."



YAKITY SENDS THIS WORD TO ALL OF YOU BOYS AND GIRLS:

THE TIME IN NOW

FRANCIS TOLD US HOW--

SQUIRRELS SCAMPER AND BIRDS TWITTER

BUT

ONLY PEOPLE CAN CLEAN UP LITTER,

YOU GIVE OTHERS THE WORD

YOU ARE WISER THAN A BIRD!

Teachers may copy this
book in part or in its
entirety as they deem
necessary to improve
instruction.

In keeping with guidelines on Title IV, Section 601, Civil Rights Act of 1964; Title IX, Section 901, Educational Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, the Arkansas Department of Education assures that no person in the United States shall, on the basis of race, color, national origin, sex, or handicap be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

"Let's Twitter About Litter"

Reading Level
3.2

To the Teacher:

This material is not copyrighted and teachers are encouraged to copy any parts of the book or all of it if it would aid them in their instructional program.

One suggestion is to set up a learning center using the book "Let's Twitter About Litter". The teacher prints directions for the activities on cards to be displayed in the center. Students complete each activity independently checking beside their names when work is completed. Some possible activities are described below.

Prepare the center by duplicating one set for each student of the pictures (and poems, if desired) that are attached in this packet.

To introduce the center the teacher could read the book "Let's Twitter About Litter" aloud to students or have them take turns reading it in a reading group.

DIRECTIONS TO STUDENTS IN THE LEARNING CENTER:

Activity 1: Read the Book again and remember the order of the events.

- Activity 2.
1. Take a set of pictures and put them in order as they were in the story.
 2. Write in your own words under each picture to tell what happened in the story.
 3. Color the pictures.
 4. Make a cover for this book so that you have your own litter book. Use the colored paper and draw a picture on the front, print the title, (you make a new title if you want), write your own name on the front and then staple the book together.



Activity 3. The owl in the story is very smart. Can you think of other stories or poems where the owl is wise?



1. Read the poem below.
2. Copy the poem on a paper and draw a picture of how you think this bird looks.

A wise old owl sat in an oak
The more he saw the less he spoke
The less he spoke, the more he heard
Why can't we all be like that bird?

What is another symbol for being wise? (eg. mortarboard hat for graduation.)

Activity 4. There are words that rhyme in the story, like twitter-litter, Merle the Squirrel; Funny Bunny.



1. Make a list of some names that rhyme with animals and people; (examples--Matt the Cat, Blake the Snake, Bruce the Goose, and Skinny Winnie).

NOTE TO TEACHERS: Concrete poems are ones which need to be seen to be appreciated. The poems "Superstink" and "Off and Away" could be shown to the class on an overhead transparency or put on a chart.

If children are able to read the poems independently, follow the ideas for Activity 5; otherwise do class activities as follows:

1. Develop a class concrete poem to demonstrate as follows: Children suggest and the teacher writes the agreed-on lines on the board.
2. Children can do their own concrete poems on colored paper; these can decorate the walls of the room.

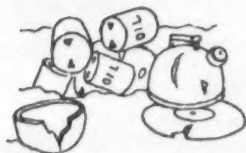
Activity 5: Read the two poems: "Off and Away" and "Superstink".

1. Think of the reasons why you don't like litter and make a list of good words that come to mind as you picture messy, ugly litter. Write these words on a paper. ('Superstink' has words that are spelled to sound like what is happening; make up some words of your own.)
2. Write a poem about litter and why it is not good to litter.

CONCEPTS TO EXTEND THROUGH CLASS ACTIVITIES AND DISCUSSIONS:

Environmental Concepts

Recycle -



- 1) Discuss ways cans and bottles are reused; eg. bottles are sterilized and refilled; aluminum cans are melted down and made into new cans which saves 95% of the energy used to mine and make new aluminum thus this is a valuable conservation method.
- 2) Discuss other recycling: paper is collected, shredded and made into new paper; this takes only 33-50% of the energy needed to make paper from wood.



Litter -

- 1) Children can share experiences that they have had with litter and their feelings about how it looks. They can make lists of specific materials they see around as litter and suggest ways not to "throw away" so much. Ask "where is away"?

List the ideas Francis has of how to help the litter problems.



1. Pay for used bottles
2. Use things again
3. Laws to take back bottles, cans and glass
4. Have places to put litter
5. Have places to fix up old things
6. Have places to burn things to make energy
7. Put trash in the ground (landfill)
8. Pay people to do things--pick up litter and fix up old things.



Natural - Resources

1. This term is introduced on page 9. A good way to arrive at a definition of natural resources is to gather examples to list on the chalkboard: using headings of renewable (will grow again, can be reused) and nonrenewable (once it is gone it is not available to use again).

2. Students may be able to identify which resources come from the ground (mined) and which are from animals or plants.



Examples:

<u>Renewable</u>	<u>Nonrenewable</u>
sunlight	coal
wind	oil
water	natural gas
wood	
metals (recycled)	



ECONOMIC CONCEPTS

Taxes and the Costs of Littering:

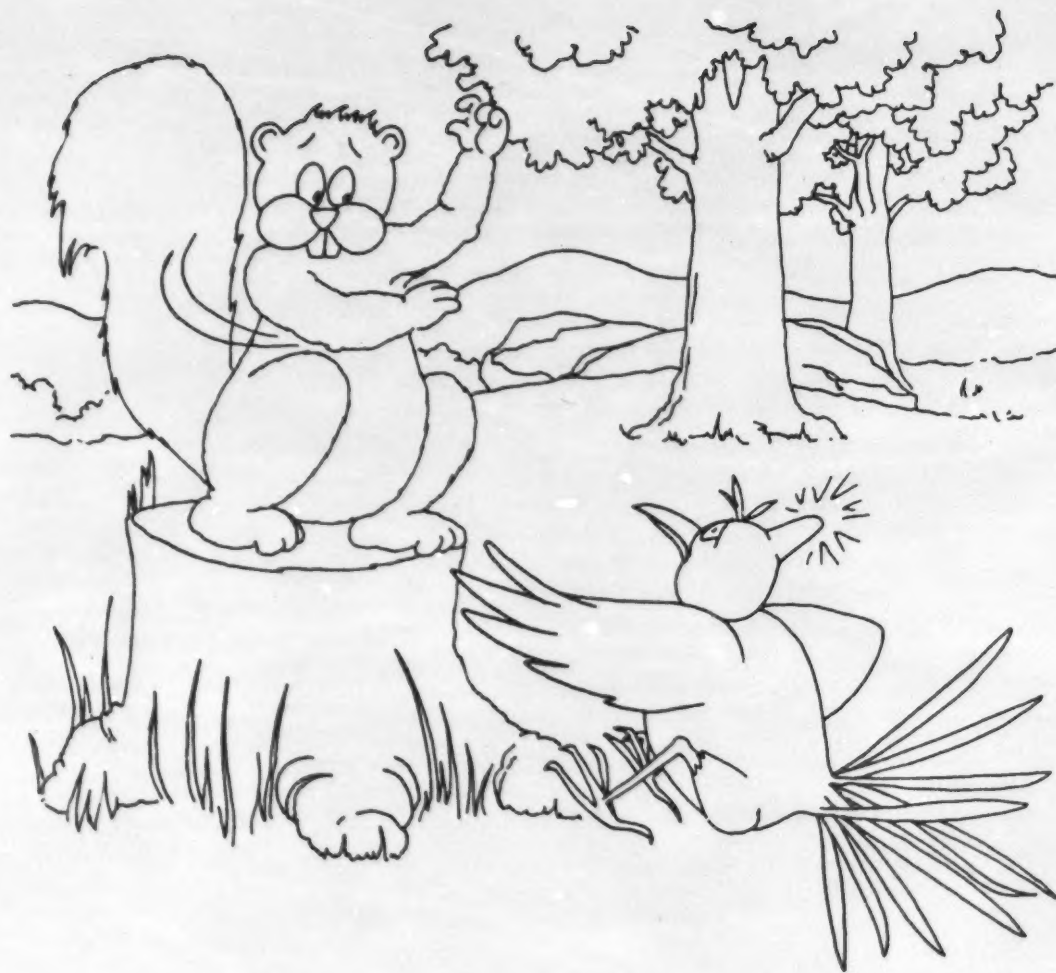
1. Children discuss all the workers it takes to clean up trash and litter (workers: pick-up garbage cans at homes, drive garbage trucks, pick up roadside litter by highways, clean the streets of town, drive bulldozers to cover trash with soil at the sanitary landfill, clean up parks and empty trash cans...others?).
2. Discuss: How taxes are paid (sales tax, income tax, property tax and others) Who collects taxes (city, county, state, federal). List many services that are paid for by taxes (teachers' salaries, libraries, police, fire, etc.).
3. Social goods--who pays? Somethings we agree are for the good of us all, not just the individual (national defense, cleaning up litter and polluted air and water, are examples). We all pay through taxes for social goods. Usually the cost of clean-up does not show in the selling price of a good; the spill-over costs are passed on to the public who may or may not buy the product.
4. Opportunity cost for a littered (or polluted) environment is the chance to enjoy a clean and healthful environment for picnics, swimming, hiking, gardening, observing birds, fish and mammals.

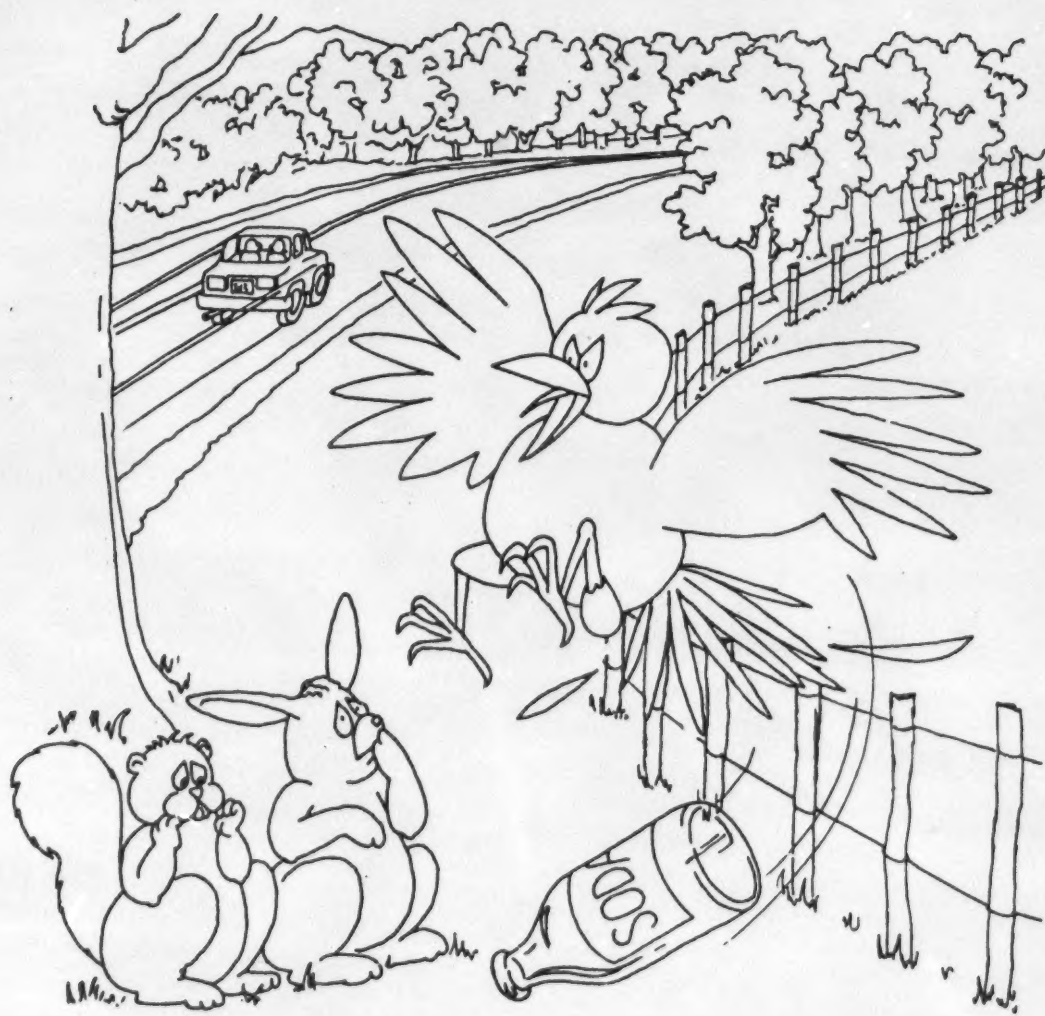
ENERGY CONCEPTS

Solid Wastes:

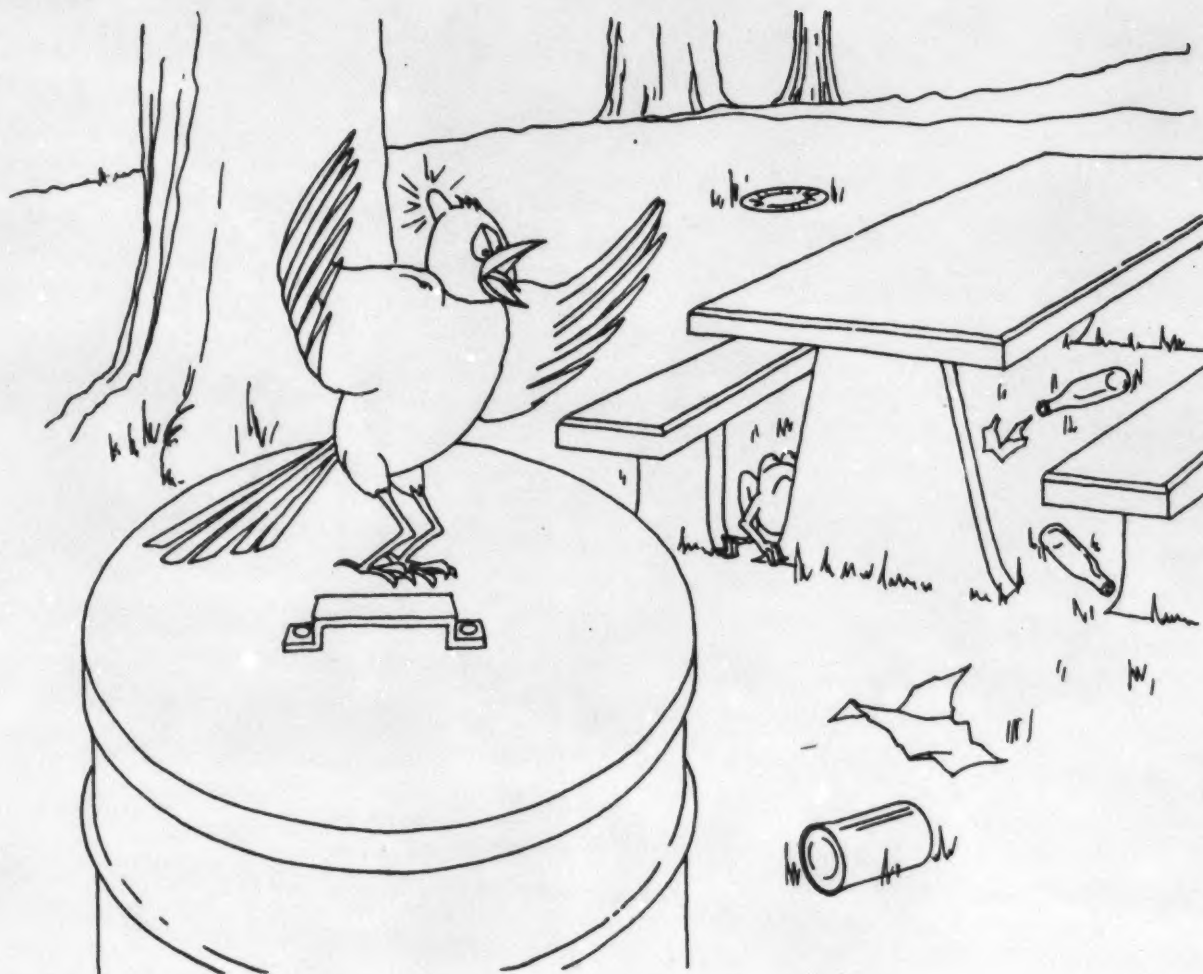
1. Some cities have co-generation plants for sorting, shredding and burning solid wastes to produce energy. Solid wastes are burned to produce heat. Water is heated to make steam. Steam is used for heating buildings or to run turbines and make electricity.
2. Some solid wastes (garbage, manure, forest products waste) can be used to produce synthetic natural gas (SNG), methane, ammonia, hydrogen, carbon monoxide or synthetic gasoline.
3. Discuss the energy used in cleaning up litter (human energy as well as gasoline in trucks, etc.).
4. Review the facts about energy saved by recycling.



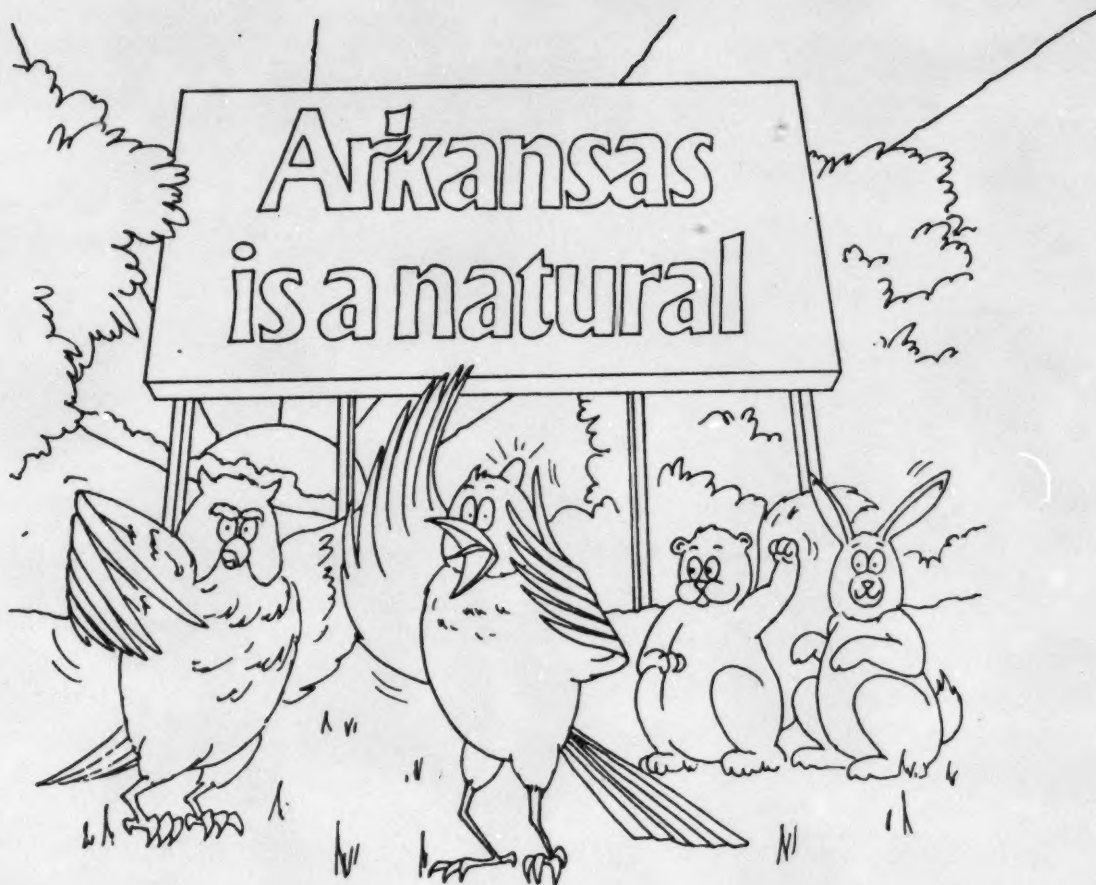












OFF AND AWAY

LITTLE PIECE OF PAPER ON THE GROUND.

GOING NOWHERE.

DOING NOTHING.

FLAT.

LITTLE PUFF OF WIND.

DOING NOTHING.

FLAT.

LITTLE PUFF OF WIND.

SW

S U P E R S T I N K

BIG BUS AT THE BUS STOP.

READY TO GO AGAIN.

BIG NOISE.

BIG CLOUD OF

SHUDDER
GASP
GULP
CHOKE
RETCH
STIFLE
COUGH
WHEEZE
SNIFFLE
STRANGLE
KATCHOO
POISON
CHOKE
#@?&%C
SNUFFLE
SNEEZE
CATAARRHH
GHUGHUGHUGHU